## PATENT COOPERATION TREATY

To:    PAUL PLUMMER   PEXNOMOBIL UPSTREAM RESEARCH COMPANY   PO BOX 2189   TO BOX 2189	From the	ONAL SEARCH	IING AUTH	ORITY		•		
WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)	To:	LUMMER				PCT		
INTERNATIONAL SEARCHING AUTHORITY  (PCT Rule 43bis.1)  Date of mailing (day/month/year)  Applicant's or agent's file reference  2003UR029  International application No.			M RESEAK	CH COMPAN I	WP	ITTEN OPINION OF THE		
Applicant's or agent's file reference  Applicant's or agent's file reference  FOR FURTHER ACTION See paragraph 2 below  Priority date (day/month/year)  International application No.  International filing date (day/month/year)  20 May 2004 (20.05.2004)  International Patent Classification (IPC) or both national classification and IPC  IPC(T): GOIV 1/28 and US C1: 702/17  Applicant  EXXONMOBIL UPSTREAM RESEARCH COMPANY  1. This opinion contains indications relating to the following items:  Box No. II Basis of the opinion  Box No. IV Priority  Box No. IV Lack of unity of invention  Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step and industrial applicability; citations and explanations supporting such statement  Box No. VI Certain documents cited  Box No. VII Certain defects in the international application  Box No. VIII Certain observations on the international application  2. FURTHER ACTION  If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.19if(b) that written opinions of this International Searching Authority will not be so considered.  If this opinion is, as provided above, considered to be a written opinion of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.  For further options, see Form PCT/ISA/220.  Name and mailing address of the ISA/ US  Mail Sup-PCT, Auri, ISA/US  Donald E. McEllheny, Jr. Donald E. McEllheny, Jr. Donald E. McEllheny, Jr. Telephone No. 571-272-1750								
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Alexandria, Virginia 22313-1450 Telephone No. 5/1-2/2-1750  Facsimile No. (703) 305-3230					Donald E. McE	lheny, Jr. Ohlum J. My		
Facsimile No. (703) 305-3230	1	P.O. Box 1450			Telephone No.	571-272-1750		
FOUND FULL LANGUAGE COUNTY OF THE PARTY OF T	Facsimile	No. (703) 305-32	230	y 2004)				

## WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/US04/15753

Box No. I Basis of this opinion						
<ol> <li>With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.</li> </ol>						
This opinion has been established on the basis of a translation from the original language into the following language which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).						
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:						
a. type of material						
a sequence listing						
table(s) related to the sequence listing						
b. format of material						
in written format						
in computer readable form						
c. time of filing/furnishing						
contained in international application as filed.						
filed together with the international application in computer readable form.						
furnished subsequently to this Authority for the purposes of search.						
<ul> <li>In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.</li> <li>Additional comments:</li> </ul>						

## WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/US04/15753

Box No. V Reasoned statement under Rule 43 bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement							
1. Statement							
	Claims	1-5 YES					
Novelty (N)		NONE NO					
Inventive step (IS)		1-5 YES					
	Claims	NONE NO					
	Claima	1-5 YES					
Industrial applicability (IA)		NONE NO					
	Clamb	NONE					
<ol> <li>Citations and explanations:</li> <li>Claims 1-5 the criteria set out in PCT Article 33(2)-(3), because the prior art does not teach or fairly suggest the method of independent claim 1 requiring the seismic data types and operations thereupon which include the development of the phase control filter for limiting wavelet phase spectrum.</li> <li>Claims 1-5 meet the criteria set out in PCT Article 33(4), and thus have industrial applicability because the subject matter claimed can be made or used in industry.</li> </ol>							
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